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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/675,160	09/29/2003	Brian G. Goodman	TUC920030085US1	5562

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EXAMINER	
KRAVETS, LEONID	

ART UNIT	PAPER NUMBER
2189	

DATE MAILED: 05/12/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/675,160	GOODMAN ET AL.	
	Examiner	Art Unit	
	Leonid Kravets	2189	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *03 March 2006*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-37* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-31* is/are rejected.

7)☒ Claim(s) *32-37* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

Response to Amendment

1. Examiner acknowledges amendment received 3 March 2006. All amended claims and remarks have been given careful consideration. The rejection below has been necessitated by the amendment.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claims 1-3, 8-9, 11-15, 17, 20, 24-25, 27-28 and 31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Campbell (US Application 2003/0125834), and further in view of Braithwaite (US Patent 6,104,561) and Takayama (US Patent 6,421,196).

As per claim 1, Campbell discloses an automated data storage library for accessing data storage media in response to commands from at least one external host system (Fig 1, 100), comprising:

a housing unit (Fig 1, 100);

a plurality of storage shelves for storing data storage cartridges within the housing unit, a data storage cartridge including data storage medium. Campbell does not disclose the data storage cartridge including a cartridge memory (Fig 1, 101);

Takayama discloses such a data storage cartridge including a cartridge memory (Fig 1, Ref 4).

Campbell further discloses a data storage drive for reading data to and/or writing data from the data storage medium (Fig 5, 503);

Takayama discloses ~~an~~ a cartridge memory interface for reading data from and/or writing data to at least one predetermined data field ~~associated with the data storage cartridge~~ of the cartridge memory (Fig 1, Ref 4; Fig 4, Ref 5);

Campbell discloses a robot accessor for transporting data storage cartridges between the storage shelves and the data storage drive (Fig 5, 502);

Campbell does not disclose a processor programmed with instructions to modify the at least one predetermined data field to render data stored on the data storage medium inaccessible.

Braithwaite discloses such a processor programmed with instructions to modify the at least one predetermined data field to render data stored on the data storage medium inaccessible (Column 2, lines 43-46, 53-55).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to incorporate the protect sector of Braithwaite into the system of

Campbell, since Campbell and Braithwaite are from the same field of endeavor, namely mass data storage and this would allow for protection of sensitive data.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to incorporate the memory chip into the tape cartridge of the system of Campbell as this provides an easy and quick way to manage the tape cartridges (Takayama, Col 1, Lines 57-53).

As per claim 2, the combination of Campbell, Takayama and Braithwaite discloses the automated data storage library of claim 1, the processor further programmed with instructions to restore the at least one predetermined data field to render data stored on the data storage medium accessible (Braithwaite, Column 2, lines 43-46, 51-53).

As per claim 3, the combination of Campbell, Takayama and Braithwaite discloses the automated data storage library of claim 1, the processor further programmed with instructions to direct the data storage drive to apply a correction to data read from the at least one modified predetermined data field wherein data ~~stored on~~ read from the data storage medium is rendered ~~accessible~~ readable to the data storage device (Takayama, Column 9, Lines 58 – 64).

As per claim 8, the combination of Campbell, Takayama and Braithwaite discloses the automated data storage library of claim 1, wherein the cartridge memory interface is integrated with the storage drive (Takayama, Fig 6, Ref 5 and 33).

As per claim 9, the system of Campbell, Takayama and Braithwaite discloses the automated data storage library of claim 1, wherein the cartridge memory interface is integrated with the robot accessor (Fig 3, Ref 33)

As per claim 11, the combination of Campbell, Takayama and Braithwaite discloses the automated data storage library of claim 1, further comprising an export station ~~associated with~~ in the housing unit (Campbell, Fig 1, Ref 107), the processor further programmed with instructions to ~~restore the predetermined data field and render data stored on the data storage medium accessible when~~ require a correct password before the data storage cartridge is removed from the automated data storage library through the export station [A password requirement before ejecting a tape in a secure environment as that of Campbell, Braithwaite and Takayama is obvious as the prior art looks to prevent unauthorized access].

As per claim 12, the combination of Campbell, Takayama and Braithwaite discloses a method for accessing data stored on data storage media stored within an automated data storage library (Campbell, Page 1, Paragraph 16), Campbell does not disclose the data storage media housed within a data storage cartridge having a

cartridge memory. Takayama discloses the data storage media housed within a data storage cartridge having a cartridge memory (Fig 1, Ref 4), the method comprising:

Campbell further discloses retrieving a data storage cartridge from a storage shelf in the data storage library (Campbell, Page 1, Paragraph 18). Campbell does not disclose at least one predetermined data field ~~associated with the data storage~~ in the cartridge memory having first contents whereby data stored on the data storage medium is accessible. Takayama and Braithwaite disclose at least one predetermined data field ~~associated with the data storage~~ in the cartridge memory having first contents whereby data stored on the data storage medium is accessible [Takayama discloses an identifier field in the cartridge memory for preventing an event where writing is performed to an unintended recording medium (Col 25, Lines 27-30). Braithwaite further discloses writing identifiers to prevent improper access (Col 2, Lines 51-53)];

Braithwaite further discloses modifying the at least one predetermined data field to have second contents whereby the data stored on the data storage medium is inaccessible [Braithwaite allows for the data field to be changed from accessible to inaccessible, since he discloses both of these states (Col 2, lines 53-55, line 63 - Col 3 line 3)].

As per claim 13, please see rejection of claim 9 above.

As per claim 14, the combination of Campbell, Takayama and Braithwaite discloses the method of claim 12, wherein the step of modifying the at least one

predetermined data field is performed by ~~an~~ a cartridge memory interface integrated with a data storage drive in the data storage library (Takayama, Fig 3, Ref 4, 5, 33).

As per claim 15, the combination of Campbell, Takayama and Braithwaite discloses the method of claim 12, further comprising:

~~modifying~~ restoring the at least one predetermined data field to have ~~third~~ the second contents whereby the data stored on the data storage medium is rendered accessible (Braithwaite, Col 2, Lines 51-53, line 63 - Col 3 line 3); and

accessing the data stored on the data storage medium [accessing data when the data is accessible on the storage medium is obvious].

As per claim 17, the combination of Campbell, Takayama and Braithwaite discloses the method of claim 12, further comprising:

providing a correction to the second contents ~~for~~ of the at least one predetermined data field whereby the data ~~stored on~~ read from the data storage medium ~~is accessible~~ readable to a data storage drive [Takayama, Column 9, Lines 58 – 64]; and

~~accessing~~ reading the data stored on the data storage medium [accessing data when the data is accessible on the storage medium is obvious].

As per claim 20, the combination of Campbell and Braithwaite discloses a computer readable medium having computer-executable instructions to perform the

method of claim 12 [a computer readable medium having computer-executable instructions is inherent to the method of claim 12, a data field on the data cartridge can only be modified using a computer program].

As per claim 24, Takayama discloses a controller for an automated storage library (Fig 19, Ref 80), comprising:

means for receiving a request to move a data storage cartridge (Col 12, Lines 59-61);

means for directing a robot accessor to retrieve the data storage cartridge ~~from a storage shelf within the automated storage library~~ (Col 12, Lines 59-61);

Braithwaite further discloses ~~means for performing a first modification~~ modifying contents of at least one predetermined data field ~~associated with~~ of a cartridge memory of the data storage cartridge to render data stored on the data storage medium ~~accessible~~ inaccessible (Col 2 lines 51-53, 63-67);

Takayama further provides means for providing access to the data on the data storage medium (Col 2 lines 51-53, 63-67);

~~means for performing a second modification of the at least one predetermined data field to render the data stored on the data storage medium inaccessible (Col 2 lines 53-55, 63-67); and~~

means for directing the robot accessor to ~~return~~ move the data storage cartridge to a storage shelf within a housing unit of the automated storage library [Takayama discloses housing the tape with respect to the magazine (Col 12, Lines 43-44)].

As per claim 25, please see rejection of claim 3 above.

As per claim 27, please see rejection of claim 9 above

As per claim 28, please see rejection of claim 8 above.

As per claim 31, Campbell, Takayama and Braithwaite disclose the controller of claim 24, wherein means for providing access comprises means for restoring the contents of the at least one predetermined data field (Col 2 lines 51-53, 63-67).

3. Claims 6 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Campbell in view of Braithwaite as applied to claim 1 above, and further in view of Kataoka (US Patent 5,857,021).

As per claim 6, the combination of Campbell and Braithwaite discloses the automated data storage library of claim 1, further comprising a plurality of logical libraries [Campbell discloses physical libraries (Fig 3, Ref. 100, 200) it is obvious that logical libraries can be used to achieve the same purpose]. Campbell does not disclose the processor further programmed with instructions to write an identifier, associated with at least one predetermined logical library, to the at least one predetermined data field whereby data stored on the data storage medium is accessible only by a data storage drive assigned to the at least one predetermined logical library.

Kataoka discloses writing an identifier into the storage medium identifying a terminal, allowing access to the storage medium only when the individual identifier extracted from the storage medium and the terminal identifier are both valid. (Col 1, line 64 – Col2, line 3). A terminal is defined as a device, through which data or information can be entered or displayed. The applicant's library is thus such a terminal.

As per claim 7, please see the rejection of claim 6 above.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to incorporate the identification of libraries of Kataoka into the system of Campbell and Braithwaite. This would allow for protection of data from unauthorized library access.

4. Claims 21 - 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Takayama (US Patent 6,195,007) in view of Kataoka, and further in view of Campbell.

As per claim 21, the system of Takayama discloses a method for accessing data stored on data storage media stored within an automated data storage library (Col 12, Lines 37-42), the data storage media housed within a data storage cartridge having a cartridge memory (Fig 1), the method comprising:

Takayama further discloses retrieving a data storage cartridge from a storage shelf in the data storage library for access by a first library (Col 12, Lines 59-61);

Kataoka discloses reading at least one identifier stored in the cartridge memory of the retrieved data storage cartridge (Col 4, Lines 63-66);

determining whether the at least one identifier read from the cartridge memory identifies the first library [A terminal is defined as a device, through which data or information can be entered or displayed. The applicant's library is thus such a terminal. (Col 5, Lines 11-15)]; and

if the at least one identifier read from the cartridge memory identifies the first library, accessing the data stored on the retrieved data storage cartridge (Col 5, lines 23-27); and

if the at least one identifier read from the cartridge memory does not identify the first library, preventing access to the data stored on the retrieved data storage cartridge (Col 5, 16-17).

As per claim 22, the combination of Takayama and Kataoka disclose the method of claim 21. Kataoka and Takayama do not disclose that the first library is one of a plurality of logical libraries within the data storage library. Campbell discloses such a plurality of libraries [Campbell discloses physical libraries (Fig 3, Ref. 100, 200) it is obvious that logical libraries can be used to achieve the same purpose of larger amounts of data storage].

As per claim 23, please see rejection of claim 22 above.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to incorporate the plurality of libraries of Campbell into the system of Kataoka and Takayama, since Takayama, Kataoka and Campbell form the same field of endeavor, namely mass data storage and this would allow for larger data storage capacity.

5. Claim 30 is rejected under 35 U.S.C. 103(a) as being unpatentable over Takayama in view of Braithwaite, and further in view of Campbell and Kataoka.

As per claim 30, Takayama and Braithwaite disclose the controller of claim 24.

Campbell further discloses the automated storage library comprising a plurality of libraries (Fig 3, Ref. 100, 200); and

Katayama discloses the controller further comprising means for writing at least one identifier, associated with at least one predetermined library, to the cartridge memory whereby data stored on the data storage medium is accessible only to a drive assigned to the at least one predetermined library (Col 1 line 64 – Col 2, line 3).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to incorporate the multiple libraries and identification thereof of Campbell and Kataoka into the system of Takayama and Braithwaite, since Braithwaite, Takayama, Braithwaite and Kataoka form the same field of endeavor,

namely mass data storage and this would allow for secure access and protection to larger amounts of data.

Response to Arguments

6. In response to argument on page 11 with respect to claim 6, Examiner points out that while logical and physical libraries serve different purposes, identification of such libraries can be performed in the same manner, as it is simply a function of providing each unique library with its own unique identifier. Thus, identification of physical libraries is equated to logical libraries. Examiner further notes that in arguments, applicants state a terminal is not the same as a tape since a terminal is an input/output device while a library is a data storage device, but as is known to one of ordinary skill in the art a library indeed provides the same function of input/output.

7. This reasoning is further applied to the arguments under claims 21-23.

Allowable Subject Matter

8. Claims 32-37 objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Leonid Kravets whose telephone number is 571-272-2706. The examiner can normally be reached on Mon-Fri 8-430.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Reginald Bragdon can be reached on 571-272-4204. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Leonid Kravets
Patent Examiner
Art Unit 2189

Reginald G. Bragdon
REGINALD G. BRAGDON
PRIMARY EXAMINER

May 8, 2006